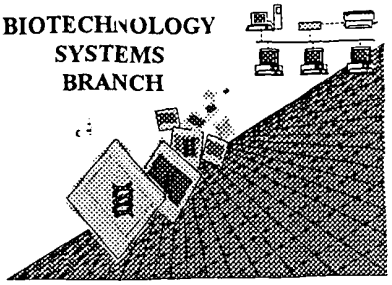
BIOTECHNOLOGY SYSTEMS BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

#15

Application Serial Number: 09/478,188A

Source: 1652

Date Processed by STIC: 7/9/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

1652

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/478,188A

DATE: 07/09/2001
TIME: 13:20:53

Input Set : A:\407T-896010US seq list 2.txt
Output Set: N:\CRF3\07092001\I478188A.raw

Does Not Comply
Corrected Diskette Needed

```
  3 <110> APPLICANT: Shen, Ben
  4       Liu, Wen
  5       Christenson, Steven D.
  6       Standage, Scott
  8 <120> TITLE OF INVENTION: GENE CLUSTER FOR PRODUCTION OF THE ENEDIYNE ANTITUMOR
  9       ANTIBIOTIC C-1027
 11 <130> FILE REFERENCE: 407T-896010US
 13 <140> CURRENT APPLICATION NUMBER: 09/478188A
 14 <141> CURRENT FILING DATE: 2000-01-05
 16 <150> PRIOR APPLICATION NUMBER: 60/115434
 17 <151> PRIOR FILING DATE: 1999-01-06
E--> 19 <160> NUMBER OF SEQ ID NOS: 102
 21 <170> SOFTWARE: PatentIn Ver. 2.1
```

111 (see next page)

ERRORED SEQUENCES

E--> 2445 <210> SEQ ID NO: 102

FYI →

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

<210> 111

<211> 20

<212> DNA

<213> Artificial

last sequence in file

<220>

<223> primer

<400> 111
gggcgtcagg ccgtaagaag 20

see next page for more error

<210> 102
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

delete - see below

<210> 102

<211> 23

<212> DNA

<213> Artificial

VERIFICATION SUMMARY DATE: 07/09/2001
PATENT APPLICATION: **US/09/478,188A** TIME: 13:20:55

Input Set : **A:\407T-896010US seq list 2.txt**
Output Set: **N:\CRF3\07092001\I478188A.raw**

L:2445 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO:102
L:2447 M:280 W: Numeric Identifier already exists, Length not replaced.
L:2449 M:280 W: Numeric Identifier already exists, Type not replaced.
L:2451 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:2451 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:102
L:2489 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:103
L:2527 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:104
L:2586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104
L:2595 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:105
L:2664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105
L:2673 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:106
L:2711 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:107
L:2779 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:108
L:2847 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:109
L:2915 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:110
L:2933 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:111
L:19 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (102) Counted (111)